Dairy Production

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AGRICULTURAL MARKETING SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

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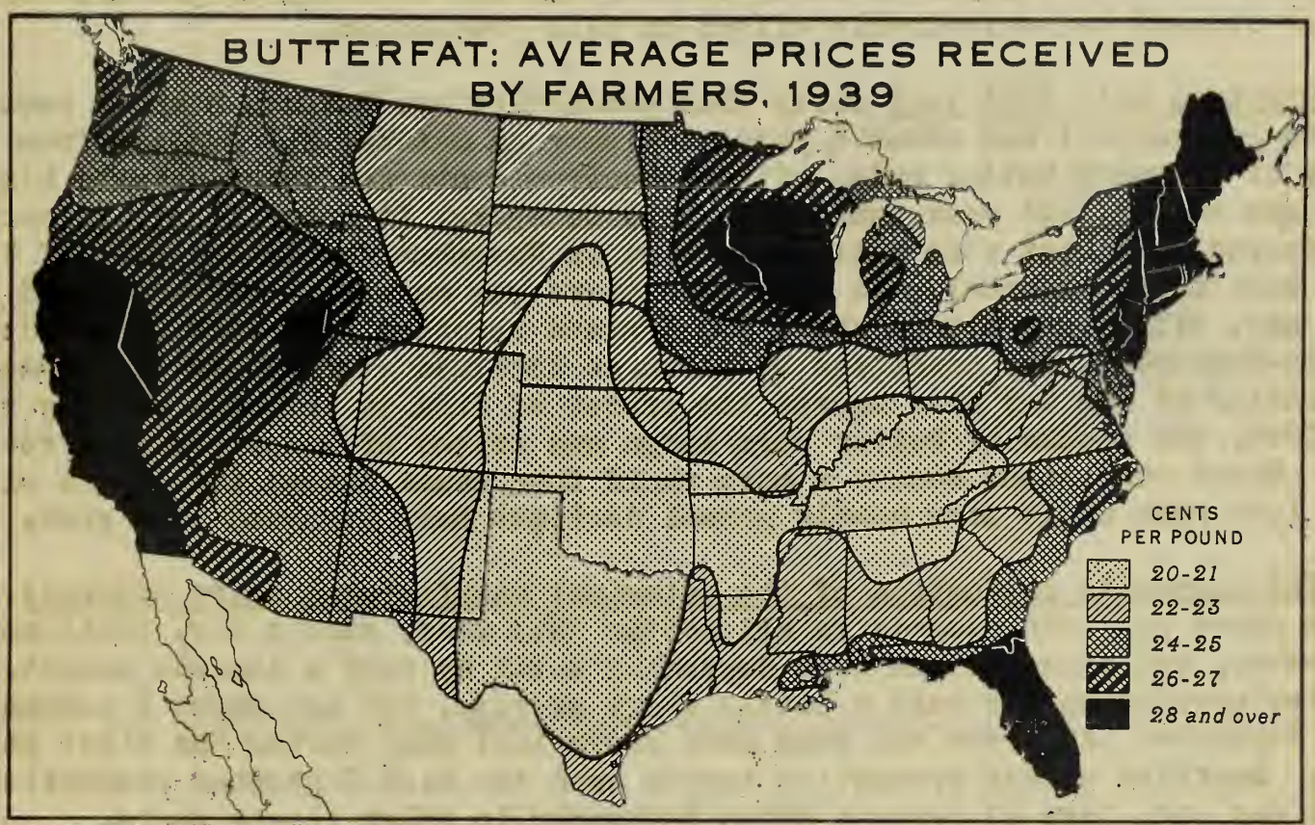


U. S. DEPARTMENT OF AGRICULTURE NEG. 288 AGRICULTURAL MARKETING SERVICE

THE LARGE REGIONAL DIFFERENCES IN PRICES FARMERS RECEIVE FOR BUTTERFAT ARE PRIMARILY DUE TO DIFFERENCES IN QUALITY, AND IN MARKETING, AND HANDLING COSTS. THE QUALITY IS USUALLY THE HIGHEST AND HANDLING COSTS LOWEST WHERE PRODUCTION PER FARM IS HEAVY. IN 1939 CREAM SOLD FOR BUTTER PRODUCTION BROUGHT 28 CENTS OR MORE PER POUND OF BUTTERFAT IN MOST AREAS WHERE THE VOLUME SOLD PER PRODUCER IS TWICE THE UNITED STATES' AVERAGE OF ABOUT 15 POUNDS PER WEEK. PRICES ALSO AVERAGED HIGH IN SOME COASTAL AREAS WHERE THE VERY SMALL VOLUME SOLD WAS MOSTLY SWEET CREAM FOR FLUID CONSUMPTION. PRICES AVERAGED 21 CENTS OR LESS IN A LARGE CENTRAL AREA, WHERE BUTTERFAT DELIVERIES PER PRODUCER AVERAGE LESS THAN 10 POUNDS PER WEEK.

DAIRY PRODUCTION SUMMARY

Milk production, though recently higher than at the same season in other years, shows about the normal seasonal decline, the Agricultural Marketing Service reports. Stocks of dairy products in storage are about average and have been declining about as usual; and prices of milk and dairy products show about the usual seasonal increases. Thus production does not appear to be exceeding current requirements. Furthermore, with dairy herds increasing only slowly and feed prices in fair balance with prices of dairy products there is no reason to expect any marked departure from the usual seasonal changes in production this fall, except insofar as weather and pasture conditions are causing temporary and more or less local irregularities.

Milk production in September appears to have been not only the highest total for the month of record but it was probably higher in proportion to population than in any recent September. The October 1 reports showed production per cow only slightly above average in the South Central area where pastures are rather poor but substantially above average in practically all other parts of the country, including even Indiana, Illinois and Nebraska where pastures were poor. The October 1 reports from the various areas show no signs of abnormal seasonal trends such as have occurred at this season in several recent years, but the weekly reports on butter production indicate that the mild weather of early October and the recovery of pastures after the September drought had a favorable effect on milk production.

Compared with last year daily milk production was between 2 and 3 percent higher on September 1 and about 6 percent higher on October 1. Judging from the quantity of creamery butter made, milk production continued substantially higher than at the same season last year until well into October. It seems likely to continue high compared with last year until some time in November for in the fall of 1939 conditions were quite abnormal. At that time there was an almost unprecedented fall drought and, with temperatures above 100 degrees reported from some Corn Belt areas until mid-September, the condition of pastures declined sharply and continued low. The beginning of the war also caused the prices of feed to increase sharply in September 1939, but stocks of butter were large and prices of dairy products rose more slowly. These conditions caused a more rapid than usual autumn decline in milk production last year while more nearly normal declines have occurred this year.

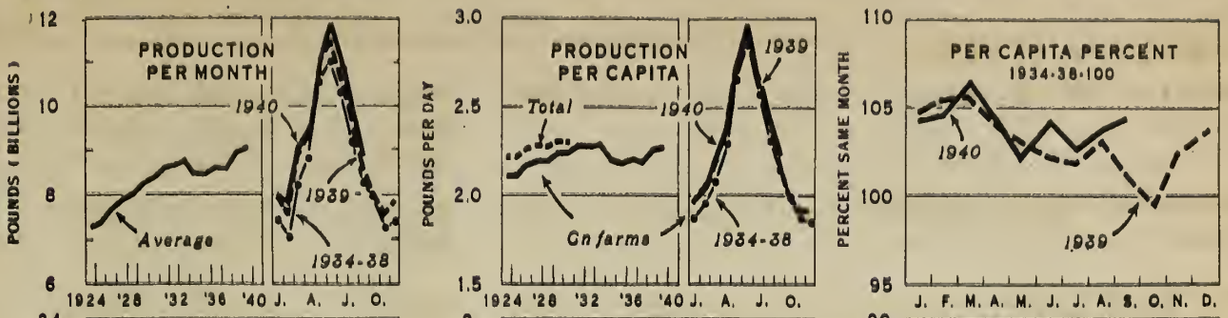
The aggregate production of the principal manufactured dairy products, which has been above previous records in all months this year, except May, continued high in September, but exceeded the 1938 September total by only a nominal amount. Creamery butter production was only a little above average, but was about 9 percent higher than in September last year and even more above last year during the first third of October. American cheese production topped even the high September production of 1935 and was more than 10 percent above September in other recent years.

Stocks of dairy products on October 1 were a little more than 4 percent above the 5-year average but appear about normal, considering the increase in population and the increased per capita consumption of cheese and evaporated milk. Commercial holdings of butter were about the same as a year previous and about 5 percent above the 5-year average for the date. Cheese stocks were about 5 percent greater than on October 1, 1938, the previous high for the date. The decrease in stocks of dairy products during September was about normal but much less than in September of 1939 when rising prices caused heavy purchases of evaporated milk and other products by consumers and dealers.

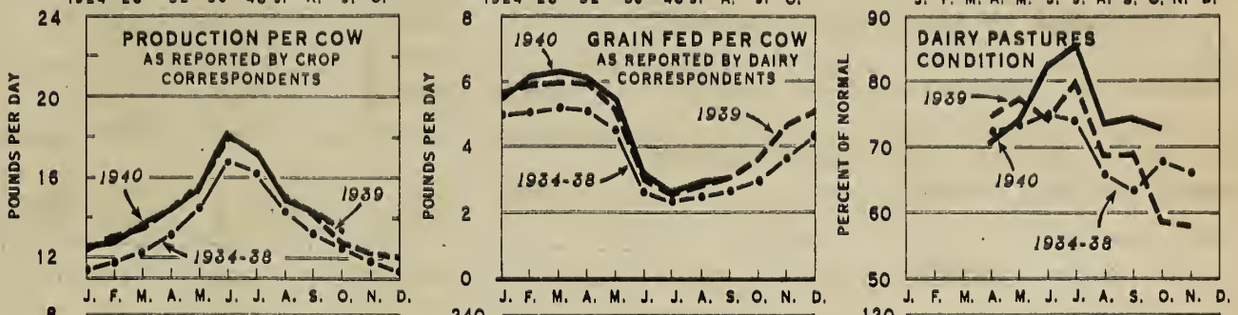
Prices of dairy products have shown about the usual seasonal changes. Present prices to producers are probably quite close to the October averages for 1939 and 1934-38.

DAIRY PRODUCTION: GRAPHIC SUMMARY FOR THE UNITED STATES

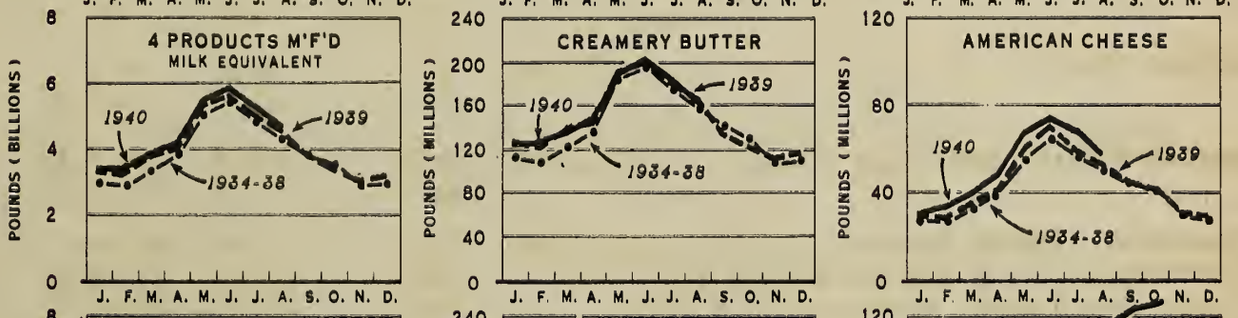
MILK PRODUCTION ON FARMS



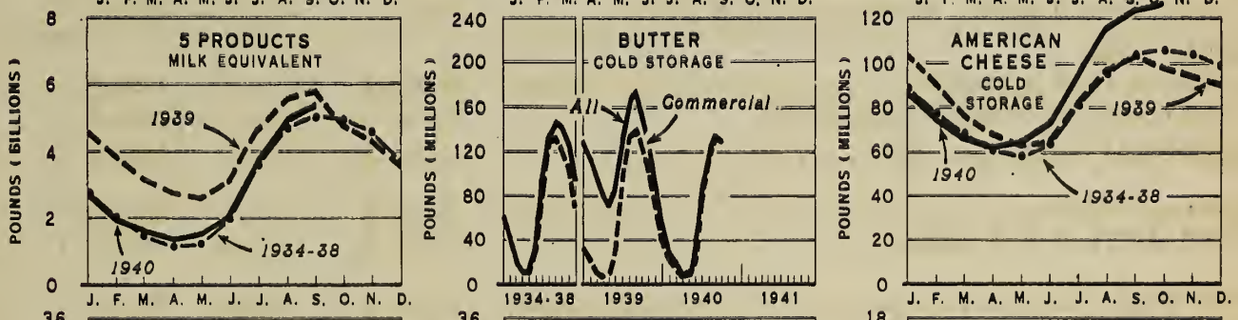
MILK PRODUCTION FACTORS



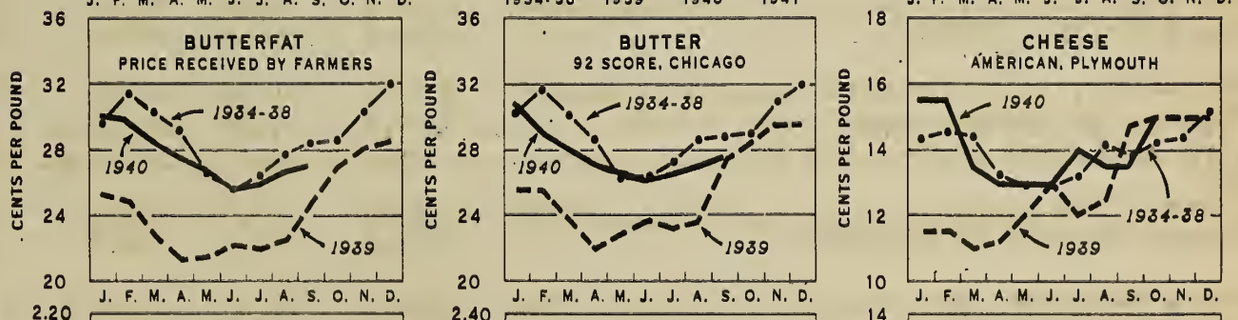
DAIRY PRODUCTS MANUFACTURED



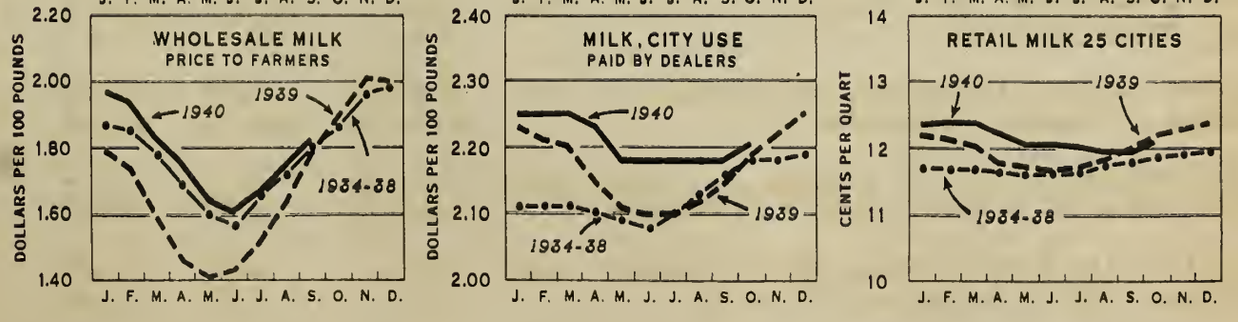
STOCKS



PRICES



PRICE OF MILK



U S DEPARTMENT OF AGRICULTURE NEG. 220 AGRICULTURAL MARKETING SERVICE

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Dairy Production — October 15, 1940

SUMMARY OF DAIRY STATISTICS FOR THE UNITED STATES

			Average 1934-38	1939	1940 Total or avg.	1940 Percent of 1939
MILK PRODUCTION ON FARMS						
Total, per month	mil.lbs.	July	10,266	10,671	10,834 a/	101.5
		Aug.	9,194	9,672	9,812 a/	101.4
		Sept.	8,262	8,533	8,865 a/	103.9
Per capita, daily average.....	lbs.	Aug.	2,307	2.376	2.393 a/	100.7
		Sept.	2.141	2.165	2.233 a/	103.1
Per cow, per day..... (As reported by crop correspondents)	lbs.	Aug. 1	14.27	15.10	14.98	99.2
		Sept.1	13.23	14.17	14.39	101.6
		Oct. 1	12.54	12.82	13.40	104.5
DAIRY PASTURES: Condition, % of normal	pct.	Sept.1	63.2	68.8	74.1	107.7
		Oct. 1	67.9	58.5	72.8	124.4
PRODUCTION OF MANUFACTURED DAIRY PRODUCTS						
Creamery butter, monthly.....	mil.lbs.	Aug.	156.4	164.9 b/	163.7 b/	99.3
		Sept.	138.6	132.4 b/	144.0ad/	108.8
weekly.....	week ending	Oct.3	---	---	---	108.0
		Oct.10	---	---	---	111.0
American cheese	mil.lbs.	Aug.	49.6	54.4	57.6 b/	105.9
		Sept.	43.8	45.7 b/	50.6ad/	110.7
Evaporated milk, case	mil.lbs.	July	205.7	226.7 a/	260.7 a/	115.0
		Aug.	172.7	191.4 a/	231.6 a/	121.0
4 products, milk equivalent..... (Creamery butter x 21, all cheese except skim x 10, canned cond. & evap. milk x 2.2)	mil.lbs.	July	4,827	5,025	5,270	104.9
		Aug.	4,291	4,579 b/	4,685	102.3
		Sept.	3,833	3,748	--	109.2c/
STOCKS ON HAND						
Butter in cold storage..... (Including government holdings)	mil.lbs.	Sept.1	145.1	172.8	134.3	77.7
		Oct. 1	142.4	154.6	128.0 a/	82.8
Commercial holdings, only.....		Oct. 1	122.0	128.2	127.9 a/	99.8
American cheese..... (Cold storage holdings)	mil.lbs.	Sept.1	104.0	103.6	125.3	120.9
		Oct. 1	106.4	97.5	127.1 a/	130.4
Evaporated milk, case..... (Manufacturers' stocks)	mil.lbs.	Aug. 1	253.1	341.7	321.3	94.0
		Sept.1	262.2	355.1	349.4	98.4
5 products, milk equivalent..... (Butter, all cheese, canned cond. & evap. milk plus cream in cold storage)	mil.lbs.	Aug. 1	4,682	5,585	4,952	88.7
		Sept.1	5,056	5,799	5,308	91.5
		Oct. 1	5,006	4,841	5,222cd/	107.9
PRICES						
Butterfat, per pound..... (Prices received by farmers)	cts.	Aug.15	27.7	22.4	26.7	119.2
		Sept.15	28.4	24.7	27.1	109.7
Butter, wholesale, per pound..... (92 score, Chicago)	cts.	Sept.	28.8	27.4	27.6	100.7
		Oct.	29.0	28.4	29.5 e/	103.9
American cheese, wholesale, per pound..... (Twins, Plymouth, Wisconsin)	cts.	Sept.15	13.85	14.75	13.50	91.5
		Oct. 15	14.25	15.00	15.00	100.0
Milk, wholesale, per 100 pounds..... (All purposes, prices received by farmers)	dol.	Aug. 15	1.72	1.68	1.75	104.2
		Sept.15	1.80	1.82	1.82a/	100.0
Milk for city distribution, per 100 pounds (Prices paid by dealers, 3.5% basis)	dol.	Sept.	2.16	2.15	2.18	101.4
		Oct.	2.18	2.19	2.20	100.5
Milk, retail, delivered, per quart..... (Average, 25 markets)	cts.	Sept.	11.81	12.02	11.98b/	99.7
		Oct.	11.88	12.22	12.06a/	98.7

a/ Preliminary. b/ Preliminary revision. c/ Forecast or interpolation.
d/ Not available when accompanying chart was prepared. e/ Price October 14.

mjd

Milk Production in September, estimated at 8.86 billion pounds, was about 4 percent higher than a year ago and a record for the month. Production was aided by mild open weather and pastures which were better than in the fall months of most recent years. Supplies of supplementary feeds on farms were sufficient to assure milk cows being well fed in most areas where pastures were short.

Milk production per capita, averaging 2.23 pounds for September, was nearly 2 percent above previous high records for the month and 3 percent higher than a year ago. As compared with the same months during the 1934-38 period, which includes the worst drought years, milk production per capita was above average during each of the first 9 months of this year. In March it was 6 percent above the 5 year average, than ranged down to 2 percent above in May, and in recent months it has been from 3 to 4 percent above the average. Milk production per capita seems likely to be relatively high for the winter as a whole unless there are unforeseen radical changes in the situation.

MILK PRODUCTION ON FARMS (Million pounds)

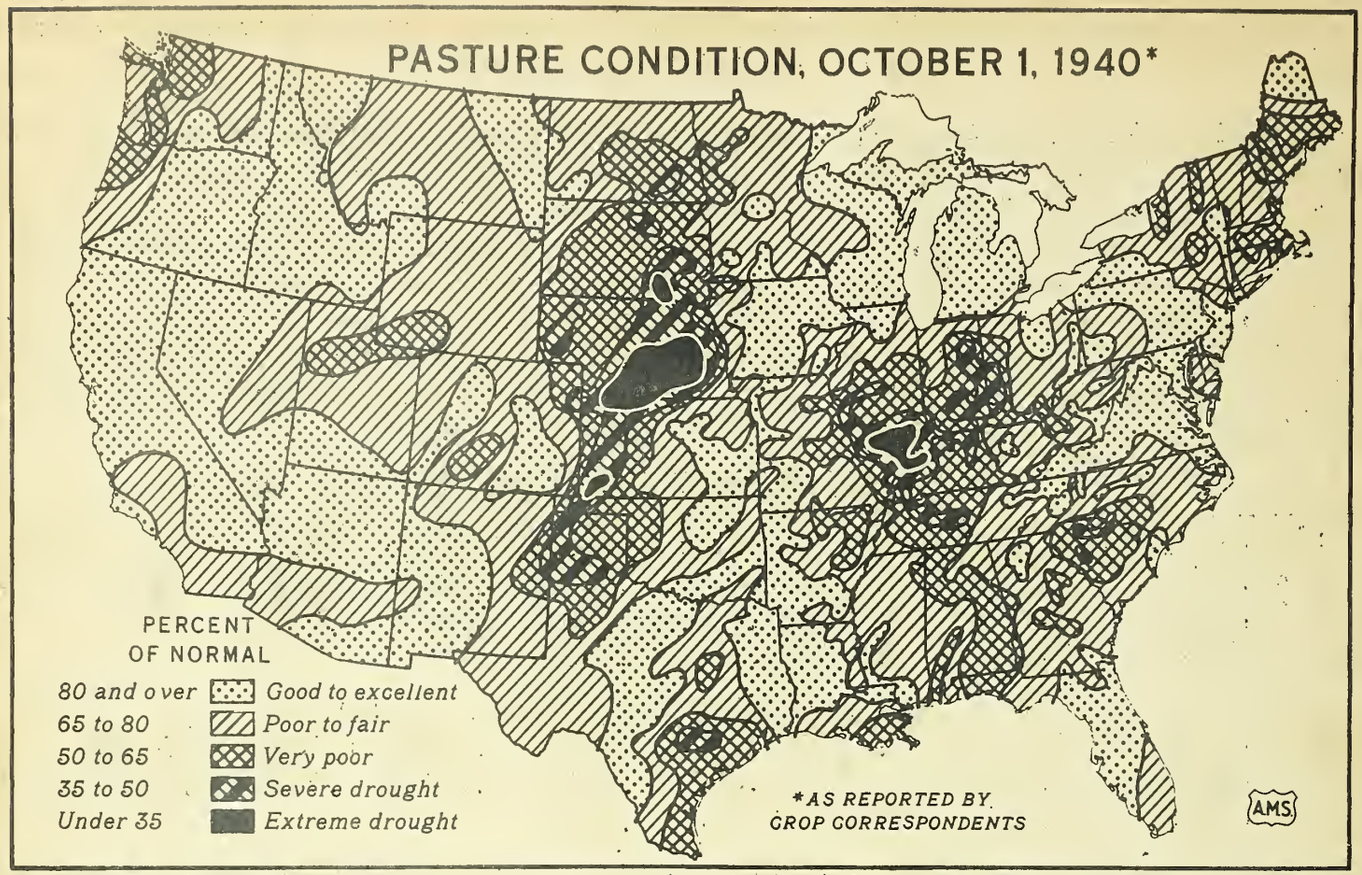
	Jan.-Mar.	Apr.-June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934-38	22,687	30,342	10,266	9,194	8,262	7,942	7,227	7,382	103,303
1939	24,338	31,895	10,671	9,672	8,533	8,077	7,556	7,816	108,558
1940	24,758	32,319	10,834	9,812	8,865				
			DAILY AVERAGE PER CAPITA (Pounds)						
1924-38	1,963	2,598	2,578	2,307	2,141	1,990	1,870	1,847	2,201
1939	2,066	2,674	2,623	2,376	2,165	1,981	1,914	1,915	2,266
1940	2,063	2,690	2,644	2,393	2,233				

Milk production per cow on October 1 was the highest reported for the date in the 16 years of record, exceeding production a year ago by about 5 percent. Production was relatively high in all major geographic divisions, exceeding the 10-year average for the date by 5 percent or more in all but the South Central group where pastures during September deteriorated rapidly from effects of dry weather.

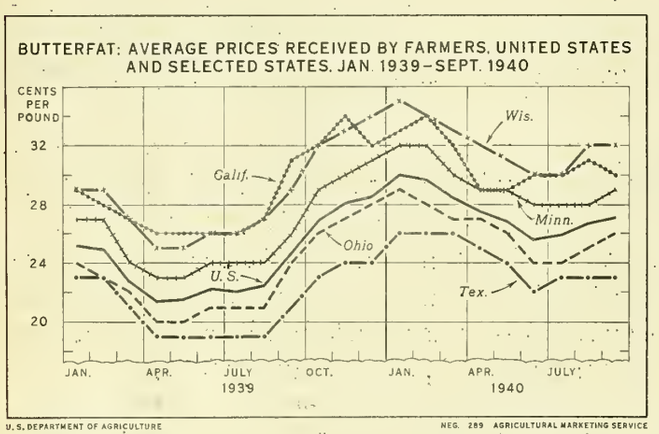
For the country as a whole, production per cow in herds kept by crop correspondents averaged 13.41 pounds, exceeding the previous October 1 high of 13.15 pounds in 1938 by about 2 percent. In the 14 other years for which records are available, production per cow for October 1 ranged from a low of 11.81 pounds in 1933 to 12.98 pounds in 1928. The proportion of milk cows in crop correspondents' herds reported in production averaged 72.3 percent -- somewhat higher than a year ago but below that for October 1 in the three years 1936, 1937 and 1938.

Dairy Pastures did not improve as they often do during September, but on October 1 the condition was still the third highest for the date in a dozen years. As shown by the accompanying map, pastures were in fair to good condition on October 1 in the northern part of the main dairy section, in some eastern States and in a large area west of the Rockies. Pastures were decidedly poor on October 1 in areas centering in Southern Illinois and south central Nebraska. However, there were good rains in some of the dry areas in late September and early October and, as creamery butter production is reported higher in the week ending October 10 than in the previous week, it seems probable that pastures recovered substantially in early October.

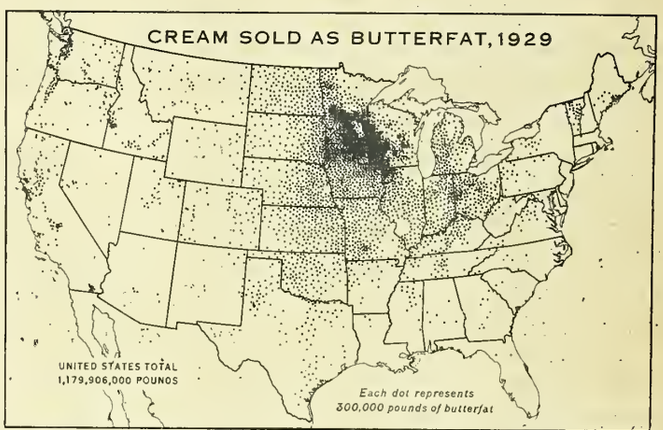
Liberal feeding of milk cows is reported from the Northeast. While lower in several States than in some drought seasons the average rate of feeding was high considering the pasturage available. Wisconsin, the only other State reporting on this item, shows slightly less than the average number of pounds per cow for October 1 but more than in other Octobers when pastures were good.



U. S. DEPARTMENT OF AGRICULTURE NEG. 295 AGRICULTURAL MARKETING SERVICE



U. S. DEPARTMENT OF AGRICULTURE NEG. 289 AGRICULTURAL MARKETING SERVICE



U. S. DEPARTMENT OF AGRICULTURE NEG. 31462 BUREAU OF AGRICULTURAL ECONOMICS

Prices received by farmers for butterfat in the principal producing States east of the Rockies usually show quite similar seasonal changes. In the Pacific Coast States prices are somewhat more dependent on local supply and demand factors. Difference between prices in the various States due in part to transportation and handling costs, do not change proportionately with changes in the price of butterfat.

Cream sold for making butter is unlike many farm products in that it brings relatively high prices in some of the areas of heaviest production. In Minnesota, Iowa and Wisconsin, which produce 37 percent of the Nation's butterfat, the 1939 price was nearly 10 percent above the U. S. average. Also, in Western and Northeastern areas, where much of the production is concentrated in certain localities or is produced by large herds, relatively high prices were secured. The principal producing areas today are about where they were 10 years ago.

DAIRY PRODUCTION

State	Milk Produced per Milk Cow in Herds Kept by Reporters 1/			Condition of Dairy Pastures 2/			Butterfat - Prices Received by Farmers		
	Oct. 1 Av. 1929-38	Oct. 1 1939	Oct. 1 1940	Oct. 1 Av. 1929-38	Oct. 1 1939	Oct. 1 1940	Sept. 15 Av. 1929-38	Sept. 15 1939	Sept. 15 1940
	Pounds			Percent			Cents		
Me.	13.8	15.0	14.7	76.5	63	67	35.9	33	36
N. H.	15.0	14.6	14.6	75.2	67	71	34.7	31	36
Vt.	13.4	13.4	14.6	79.1	68	73	36.0	30	35
Mass.	17.7	17.6	17.6	76.7	58	63	35.0	32	34
R. I.	3/	3/	3/	76.9	72	70	31.1 4/	32	34
Conn.	16.9	18.2	16.3	75.7	65	68	33.0	32	34
N. Y.	16.0	15.7	16.1	71.4	43	73	30.9	24	27
N. J.	18.2	18.8	19.0	70.8	62	79	29.2 4/	31	30
Pa.	15.9	15.7	17.5	67.9	54	81	31.8	25	28
N. Atl.	15.92	15.96	16.87	70.9	53.3	76.1	32.9	27.2	30.1
Ohio	14.6	14.7	15.2	71.5	50	70	27.9	24	26
Ind.	13.8	13.9	15.0	72.1	51	57	27.8	23	26
Ill.	12.9	14.1	14.9	63.7	65	58	27.8	23	25
Mich.	15.8	16.4	17.9	65.1	68	89	29.8	26	28
Wis.	14.0	14.7	14.8	65.3	64	82	32.4	29	32
E. N. Cent.	14.17	14.71	15.42	66.9	60.8	74.2	29.8	25.6	28.1
Minn.	12.0	12.7	12.9	61.2	64	73	30.5	26	29
Iowa	12.3	12.5	14.0	69.9	62	84	30.0	26	28
Mo.	9.8	9.8	11.9	58.7	54	72	26.3	22	24
N. Dak.	10.8	10.8	11.9	42.5	54	67	27.3	23	26
S. Dak.	9.8	9.9	10.4	46.0	44	55	27.6	23	25
Nebr.	11.5	11.4	12.1	57.5	37	41	26.9	22	25
Kans.	11.2	11.3	12.2	55.4	43	70	26.2	22	25
W. N. Cent.	11.22	11.41	12.35	59.7	54.9	70.0	28.6	24.4	27.0
Del.	3/	3/	3/	70.4	78	79	30.3	27	28
Md.	14.6	16.7	16.4	68.9	73	82	30.8	25	26
Va.	11.8	12.2	13.4	71.1	68	88	26.1	21	23
W. Va.	12.4	12.1	12.8	68.5	56	77	27.5	21	23
N. C.	11.5	12.6	12.9	76.2	74	74	25.8	22	24
S. C.	9.9	10.8	10.5	64.4	66	59	26.5	21	24
Ga.	8.4	9.5	8.8	66.2	75	68	24.9	22	24
Fla.	3/	3/	3/	80.6	85	76	28.7	29	29
S. Atl.	11.06	12.04	12.37	70.6	70.5	76.3	26.5	21.6	23.5
Ky.	12.0	12.0	12.1	72.5	54	62	25.5	20	24
Tenn.	10.3	10.4	10.9	68.5	54	63	26.1	21	25
Ala.	3/	3/	3/	67.4	80	62	24.7	21	23
Miss.	7.1	6.5	6.6	67.5	70	72	25.6	24	25
Ark.	8.1	7.7	8.7	57.2	44	75	25.3	21	23
La.	3/	3/	3/	70.2	72	80	24.8	21	25
Okla.	9.3	9.6	9.8	53.2	39	72	25.1	22	24
Tex.	9.0	8.8	9.1	62.1	49	67	24.1	21	23
S. Cent.	9.10	9.11	9.33	63.8	53.8	67.8	25.1	21.3	23.8
Mont.	12.7	15.9	15.2	57.8	74	78	27.4	24	27
Idaho	16.6	17.3	17.1	72.3	72	88	29.3	28	28
Wyo.	12.2	14.4	13.0	69.7	59	74	27.5	24	27
Colo.	11.9	14.0	13.9	64.8	47	69	26.8	22	24
N. Mex.	3/	3/	3/	71.0	69	67	26.0	23	24
Ariz.	3/	3/	3/	83.0	83	76	30.7	24	31
Utah	3/	3/	3/	68.9	68	65	30.0	28	30
Nev.	3/	3/	3/	74.2	81	83	31.6	29	30
Wash.	16.6	17.3	17.5	64.2	65	72	30.5	28	29
Oreg.	14.3	14.9	15.4	66.7	64	73	30.5	28	29
Calif.	16.9	20.1	19.0	70.1	64	83	32.9	31	30
West.	14.32	16.12	15.00	67.9	64.0	76.5	30.0	27.4	28.3
U. S.	12.38	12.82	13.40	65.4	58.5	72.8	28.8	24.7	27.1

1/ Averages represent the reported daily milk production of herds kept by reporters divided by the total number of milk cows (in milk or dry) in these herds. Figures for New England States are based on combined returns from crop and special dairy reporters and are weighted by counties. Figures for other States, regions, and U.S. are based on returns from Crop Reporters only.

2/ State averages are based on reports by crop correspondents. For regional and U.S. averages the States are combined in proportion to the importance of pastures to dairy production on October 1.

3/ State averages omitted because of instability, but reports are included in arriving at regional averages.

4/ Short time average.

HSJ

Prices received by farmers for butterfat reflect the returns obtained by about 1 1/2 million producers who skim the milk on their farms and sell cream on a butterfat basis, mostly for making creamery butter. This price and its relation to prices of other foods, to production costs, and to returns from competing farm enterprises materially affects commercial dairy production through resulting adjustments in rates of feeding, in the age at which the calves are weaned, in the quantity of butter made on the farms, in deliveries of cream as compared with milk, and in shifts between beef and dairy cattle.

The importance of the price of butterfat as one of the factors affecting production is due to the fact that butterfat producers as a group include a large number of the "marginal" dairy producers who most quickly adjust their output to changes in demand and supply conditions. A large proportion of the producers have small herds. The annual quantity of butterfat sold per farm selling butterfat is probably only about 800 pounds, the product of 4 or 5 cows. In dollars, butterfat sales per producer in 1939 were only about $200. This may have been 4 to 5 times the average sales of butter by farmers churning butter for sale but it was only about one-fifth of the average of milk sales per farm selling milk.

In some areas, particularly in the South, much of the butterfat sold is surplus production on farms where a few cows are kept to supply milk and butter for family needs, and the proportion of the cream sold depends on relative prices as well as on farm income levels. In the western and southern portions of the Corn Belt, and in the Southwest, much of the supply is produced by cows of beef or dual purpose breeding and the length of time that the calves are allowed to run with the cows depends, in part on how the price of butterfat compares with the price of beef cattle and with the cost of extra labor required for milking. Some producers are also in a position to shift to selling butter or milk when the price of butterfat is low. As many producers divide their homegrown grain supplies between milk cows and other livestock according to prospective returns, buying additional feed only when the price of butterfat is relatively high, butterfat production is quite sensitive to changes in these various price relationships.

Regional differences in the price of butterfat are marked and persistent. The usual regional pattern is shown by the 1939 averages mapped on the front cover and by the State average prices on page 7. The tendency for prices in the various States to change about the same number of cents from month to month is shown by one of the graphs on page 6. This tend for the spreads to change more slowly than does the price of butterfat sometimes causes mark changes in relative prices. Thus in 1929 when the average annual price was 39 cents in Tex and 48 cents in Minnesota the difference was 9 cents or 23 percent of the Texas price. In 1932 when the Texas price had fallen to 13 cents the difference was 7 cents or 54 percent. Since then the spread between these States has ranged from 5 cents to 7 cents.

The principal reasons for regional variations in the price of butterfat appear to b differences in quality, and in costs of assembling and handling. Prices also tend to be h er near the centers of population, particularly on the Pacific Coast, and where little or cream is sold for making butter the average price reflects the higher butterfat value of cream sold for other purposes. Both quality and handling costs appear to be closely rela to the volume of butterfat sold per farm. Thus, in the intensive butter-producing counti the upper Mississippi Valley, herds are large, creameries are close together and, in some trucks pick up the cream every day. Under such conditions a high standard of quality can maintained, butterfat commands a premium price and most producers receive the full price by the creameries, except for hauling costs. On the other hand, where butterfat sales a unimportant so much of the cream is sold in small lots at irregular intervals that the q averages low; and the cost of buying, testing, and shipping small volumes to a more or l distant creamery cuts down the price that the country stores and local cream buyers can producers.

Estimates of the price of butterfat are believed to have a rather high degree of cision in important producing areas because of the extremely large number of sales. Co United States average is published regularly in "Dairy Production" but average prices i various States may be obtained from the "Mid-Month Local Price Report" issued by the A tural Marketing Service on or about the 29th of each month.